

INTERNATIONAL SEARCH REPORT

International application No.

PCT/AU2004/001254

A. CLASSIFICATION OF SUBJECT MATTER

Int. Cl. ⁷: G06F 9/445, G06F 15/16

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
USPTO, DWPI, esp@cenet, citeseer: instruction, encode, decode, stub, skeleton, 'virtual machine', bytecode, unicode, endian, network

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US-2003/0140180-A1 (BROWN et al.) 24 July 2003 See whole document	8-10, 48, 51
X	EP-0766172-B1 (SUN MICROSYSTEMS, INC.) 2 April 1997 See Column 10 line 1 to column 15 line 22	1-7, 46
A	US-6578193-B1 (ADAMS) 10 June 2003 See abstract	
A	US-2003/0009539-A1 (HATTORI) 9 January 2003 See abstract	

Further documents are listed in the continuation of Box C

See patent family annex

* Special categories of cited documents:		
"A" document defining the general state of the art which is not considered to be of particular relevance	"T"	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"E" earlier application or patent but published on or after the international filing date	"X"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y"	document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"O" document referring to an oral disclosure, use, exhibition or other means	"&"	document member of the same patent family
"P" document published prior to the international filing date but later than the priority date claimed		

Date of the actual completion of the international search
1 December 2004

Date of mailing of the international search report

22 DEC 2004

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C (Continuation).

DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US-6421733-B1 (TSO et al.) 16 July 2002 See whole document	
A	WO-1998/006034-A1 (GENERAL MAGIC, INC.) 12 February 1998 See whole document	

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Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

3. Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a)

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

See Supplemental Box

1. As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:

4. No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.: 1 to 10 and 46, *and claims 48 and 51 in so far as they are appended to claims 8 to 10 only

Remark on Protest

The additional search fees were accompanied by the applicant's protest.

No protest accompanied the payment of additional search fees.

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Supplemental Box

(To be used when the space in any of Boxes I to VIII is not sufficient)

Continuation of Box No: III

Lack of unity of invention; overview of the inventions claimed:

Group (1): Claims 1 to 10 and 46 relate to a network, method and architecture for communicating instructions between at least two devices wherein selection means is provided for selecting an encoding protocol for the instructions from a set of available encoding protocols.

Group (2): Claims 11 to 14 relate to a virtual computer having an object stack or heap and an instruction set.

Group (3): Claims 15 to 18, 49 and 52 relate to a method, apparatus and computer program product for executing an instruction set using a virtual computer wherein the virtual computer is serialised to a data buffer in a first device and then transmitted to a second device.

Group (4): Claims 19 to 45, 47, 50 and 53 relate to a communications format, method, architecture, apparatus and computer program product for providing communications between two devices wherein the format has a first portion representing data and a second portion representing metadata.

*Claims 48 and 51 also relate to the invention of Group (1) in so far as they are appended to claims 8 to 10 and relate to the invention of Group (4) in so far as they are appended to claims 32 to 44. A comprehensive search of claims 48 and 51 would necessarily require two separate searches, a search for the invention of Group (1) and a search for the invention of Group (4).

Although all these inventions are applicable to the general field of networked computer systems there is no special technical feature common to all four sets of claims as required by Rule 13.2

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

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This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent Document Cited in Search Report		Patent Family Member			
US	20030140180				
EP	0766172	JP	9231076	US	5737607
US	6578193	US	6141732	US	6356996
US	20030009539				US 6408384
US	6421733	AU	68656/98	BR	9811457
		US	5902846	WO	9843177
WO	98/06034				

Due to data integration issues this family listing may not include 10 digit Australian applications filed since May 2001.

END OF ANNEX